

## REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-26 remain in the application. Claims 1-10 are subject to examination.

Claims 11-26 are withdrawn. Claims 1, 11, and 19 have been amended.

### Election/Restriction

The Examiner's comments regarding applicants' election of claims 1-10 and request for rejoinder are well taken. The withdrawn method claims 11 and 19 have been amended in order to refer back to claim 1, as suggested by the Examiner.

### Specification

The patent number of the prior art reference discussed in the introductory text of the specification is indeed 5,126,102. The Examiner's careful reading of the specification is appreciatively noted.

### Claim Rejections – Claim Amendments

Claims 2-4 have been amended in order to properly distinguish between the "component" and the "part."

The rejection of claims 6 and 7 under 35 U.S.C. § 112, second paragraph, has brought to light a discrepancy within the original set of claims. As correctly pointed out by the Examiner, the copper content of 10-40 vol.% listed in claim 6 did not agree with the numerical limitations found in claim 1. Similarly, the limitations of

claim 7 did not agree with the corresponding element (i.e., the refractory-metal-copper composite) in claim 1.

Claims 6 and 7 are, in fact, correct. The error resides in claim 1. The correct concentrations according to the invention are as follows:

- copper: 10 – 40 vol.%
- refractory metal: 60 – 90 vol.%

Claim 1 has been corrected. Support for the changes in claim 1 is found in the original specification, to wit:

- Examples 1 and 2 detail an exemplary refractory metal - copper composite that falls into the concentration range given in the amended claim 1.

**Example 1: W-15 wt.% Cu (T750)**

15 wt.% Cu in W correspond to 27.7 vol.% Cu in W (W-27.7 vol.% Cu)

**Example 2: W-20 wt.% Cu (T800)**

20 wt.% Cu in W correspond to 35.2 vol.% Cu in W (W-35.2 vol.% Cu).

- The contents specified in the dependent claims 6 and 7 point to the complementary range that should have appeared in claim 1:

**Claim 6: tungsten with 10 to 40 vol.% copper**

**Claim 7: molybdenum with 10 to 40 vol.% copper**

- The refractory metal forms a "virtually continuous skeleton" (see claim 1 and specification, p. 7, bottom, and page 9, second and third paragraphs). It is, of

course, obvious that a phase with a volume content of only 10 vol.% (10-40%) cannot form a continuous skeleton.

- The refractory metal copper composite is produced by infiltration of a porous refractory metal body with copper. Again, it is quite obvious that a porous body cannot be pressed with a porosity of up to 90% (60-90%).

The Examiner correctly noticed that the wording in claim 1, "macroscopically uniform copper and tungsten concentration progression," was incorrect. Instead, the invention comprises a refractory metal - copper composite and not only a tungsten - copper composite.

The term "refractory metals" comprises the metals tungsten, molybdenum, niobium, tantalum, and vanadium.

The wording in claim 1 has been changed to "macroscopically uniform copper and refractory metal progression." Verbatim support for the change is found in the specification on page 8, second paragraph.

The entry of the amendments is respectfully requested. Also, the continued allowance of claim 1 and the dependent claims is solicited. The changes as proposed above have no significant bearing on the Examiner's statement of the reasons for allowance. The claims, as amended, are patentable over the art of record.

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In view of the foregoing, reconsideration and allowance of claims 1-26 are solicited.

Should the Examiner have any questions or comments with regard to this paper, he is requested to telephone counsel so that the matter may be resolved.

Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Steiner LLP, No. 12-1099.

Respectfully submitted,



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